Acute Coronary Syndromes

DOES AGE IMPACT NEUROLOGIC OUTCOME IN CARDIAC ARREST SURVIVORS UNDERGOING THERAPEUTIC HYPOTHERMIA?

ACC Moderated Poster Contributions
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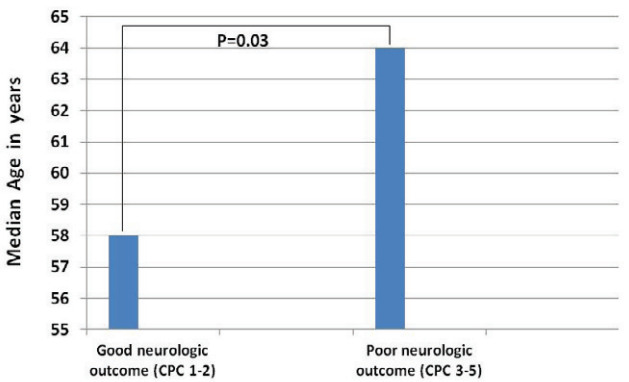
Background: The impact of age on neurologic outcome in cardiac arrest survivors undergoing therapeutic hypothermia (TH) is unclear. We hypothesized that age influenced neurologic outcome in cardiac arrest survivors who underwent TH.

Methods: Prospectively collected data on 129 consecutive adult cardiac arrest survivors admitted to a tertiary center from 3/18/2007 to 4/11/2011 who underwent TH was analyzed. The primary end-point was measured using the Pittsburgh Cerebral Performance Category (CPC) scale and patients were assessed for good (CPC 1 and 2) or poor (CPC 3 to 5) neurologic outcome prior to discharge from the hospital. Median age was calculated for the "good" and "poor" neurologic outcome group.

Results: Of the 129 post-cardiac arrest survivors who underwent TH, 55 (43%) patients had good neurologic outcome, as compared to 74 (57%) patients who had poor neurologic outcome . On further analysis, the median age of patients with good neurologic outcome was 58 (IQR: 51-65) years and the median age of patients with poor neurologic outcome was 64 (IQR:51-77) years (P=0.03)(Figure 1). On multivariable analysis using logistic regression, age (OR=0.96, 95% CI 0.93-0.99, P=0.004) and time to return of spontaneous circulation (OR=0.94, 95% CI 0.91-0.97, P=0.001) were independent predictors of neurologic outcome.

Figure 1.



CPC= Pittsburgh Cerebral Performance Category

Conclusions: Age is independently predictive of neurologic outcome in cardiac arrest survivors undergoing TH.